

Summer Stream Flows

Summer low flows

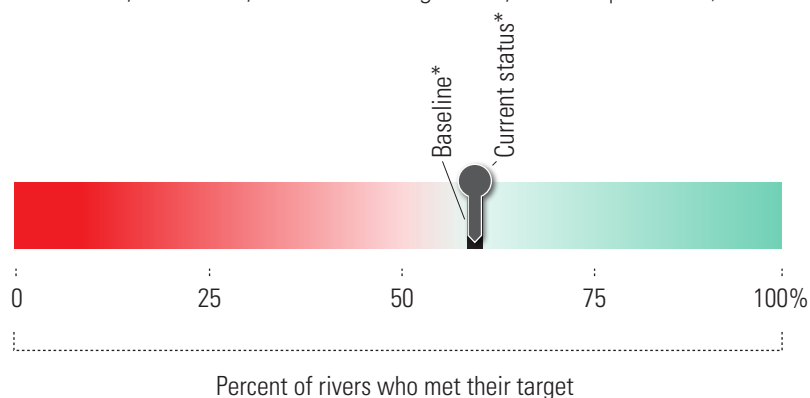
WATER QUANTITY

112

VITAL SIGNS

Progress Toward the 2020 Target

Increase, maintain, monitor, and/or restore summer flows in 12 key rivers, including those regulated by dams (Nisqually, Cedar, Skokomish, Skagit, and Green rivers) and those that are not (Puyallup, Dungeness, Nooksack, Snohomish, Deschutes, North Fork Stillaguamish, and Issaquah rivers).



* The baseline value is the percentage of rivers who met their target in 2011 (58 percent). The status value is the percentage of rivers who met their target in 2012. There has been no change between 2011 and 2012.

Is There Progress Toward the 2020 Target?

There has been no progress since 2011. The set of rivers who met their target is unchanged from 2011. Like in 2011, seven of the 12 rivers (58 percent) met their summer low flow target in 2012. Although there has been no progress since 2011, the progress since 2010 has been maintained.

The targets for low summer flows (maintain, increase, monitor, or restore) vary per river:

- Maintain stable or increasing flows in highly regulated rivers: Nisqually, Cedar, Skokomish, Skagit, and Green.
- Monitor low flow in the Elwha River after dam removal. (There is no specific flow target established for the Elwha River because of the dynamic changes occurring from river restoration activities.)
- Maintain stable flows in unregulated rivers that currently are stable: Puyallup, Dungeness, and Nooksack.

- Restore low flows to bring the Snohomish River from a weakly decreasing trend to no trend.
- Restore low flows to bring the Deschutes River, North Fork Stillaguamish River, and Issaquah Creek from a strongly decreasing trend to a weakly decreasing trend.

All five rivers that are highly regulated by dams were expected to maintain or increase their flows. The Green and Skagit rivers were stable and the Nisqually, Cedar, and Skokomish rivers had strongly or weakly increasing flows.

Three rivers not regulated by dams were expected to maintain stable flows. The Puyallup and Dungeness rivers had weak increasing flows and the Nooksack River had a weak decreasing flow; thus, two out of three met their target.

The Snohomish River remained weakly decreasing and did not meet its target. The Deschutes River, North Fork Stillaguamish River, and Issaquah Creek did not improve from strongly decreasing trends; thus, all four failed to meet their targets.

Comparing last year's indicator (data through 2011) to this year's indicator (Water Year 2012 data included), two stations changed categories:

- Nisqually River near National, Washington, changed from no trend to weakly increasing.
- Big Soos Creek changed from no trend to weakly decreasing.

Of the 29 gages tracked in 2012, 11 had trends whose rate of change increased from 2011 to 2012, and 18 had trends with rates of change that decreased. Of the streams with stable or increasing flow, equal numbers had their trends change upward or downward, which suggests some random variability but no overarching pattern. Of the streams with significantly decreasing flows, three had trends that improved, and ten have trends that grew worse, which is a troubling pattern.

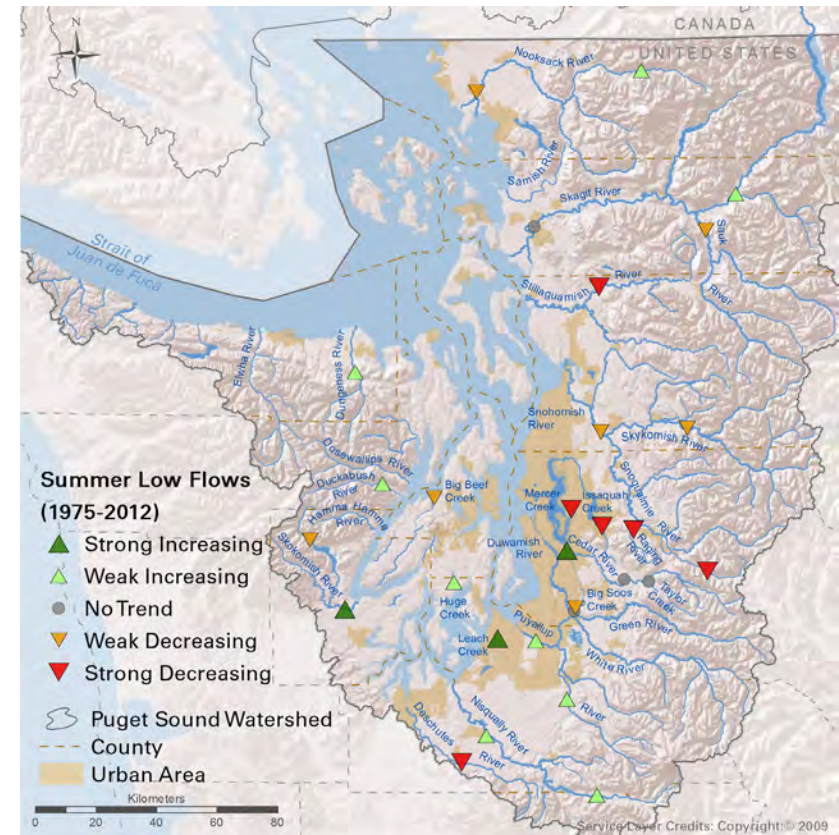


Figure 3.14.

U.S. Geological Survey, 2008. Washington State USGS Stream Flow Gages Geospatial Data

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For more in-depth information, please see:

www.psp.wa.gov/vitalsigns/summer_stream_flows.php